

03040201-05
(Great Pee Dee River)

General Description

The South Carolina portion of 03040201-05 (formerly 03040201-030, 03040201-040, a portion of 03040201-050 (to Cedar Creek), 03040201-070, and 03040201-080) is located in Chesterfield, Marlboro, and Darlington Counties and consists primarily of the ***Great Pee Dee River*** and its tributaries from Westfield Creek to Cedar Creek. The watershed occupies 225,838 acres of the Sandhills and Upper and Lower Coastal Plain regions of South Carolina. Land use/land cover in the watershed includes: 33.4% agricultural land, 29.4% forested land, 24.9% forested wetland, 6.8% urban land, 3.0% scrub/shrub land, 1.4% water, 0.7% barren land, and 0.4% nonforested wetland.

This section of the Great Pee Dee River accepts drainage from its upstream reaches, along with Westfield Creek (Little Westfield Creek, Goodmans Creek), Whites Creek (Wallace Pond, Everett Millpond), Hicks Creek, Husbands Creek, Huckleberry Branch (Wilson Branch), and the Thompson Creek Watershed near the Town of Cheraw. Phils Creek (Wolf Creek, Andersons Millpond, Grants Millpond) enters the river next, followed by Beaverdam Creek, Tarkiln Creek, Naked Creek (Bullards Millpond, McLaurins Millpond, Davids Millpond, Herndon Branch), Crooked Creek, Hugh Creek, Reedys Branch, and Cedar Creek (Spot Mill Creek). Crooked Creek accepts drainage from Lightwood Knot Creek, Usher Pond, Goodwins Pond, Burnt Factory Lake, Beverly Creek, and Lily Quick Creek before flowing through Lake Paul Wallace and McCalls Millpond near the City of Bennettsville. Cedar Creek lies within the Sand Hills State Forest and accepts drainage from Little Cedar Creek (Pool Branch), Harris Creek, Coker Pond, and Spot Mill Creek. There are a total of 457.2 stream miles and 1,939 acres of lake waters in this watershed, all classified FW.

Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
PD-339	W/INT/BIO	FW	WESTFIELD CREEK AT US 52
PD-191	W/INT	FW	WHITES CREEK AT US 1
PD-012	P/INT	FW	GREAT PEE DEE RIVER AT US 1 NE CHERAW
RL-02324	RL02	FW	LAKE WALLACE, S OF S-35-47
CL-086	W	FW	LAKE WALLACE, EQUIDISTANT FROM DAM AND SHORELINES
PD-107	S/W	FW	CROOKED CREEK AT SC 9 IN BENNETTSVILLE
PD-014	S/W	FW	CROOKED CREEK AT S-35-43
PD-063	W/INT	FW	CROOKED CREEK AT SC 912
PD-151	W/INT	FW	CEDAR CREEK AT US 52
PD-015	P/W	FW	GREAT PEE DEE RIVER AT US 15 & 401

Westfield Creek (PD-339) - Aquatic life uses are partially supported based on macroinvertebrate community data, and also due to dissolved oxygen and pH excursions, which are compounded by a significant decreasing trend in dissolved oxygen concentration. There is also a significant increasing trend in total nitrogen concentration. There is a significant decreasing trend in pH. Significant decreasing trends in turbidity and fecal coliform bacteria concentration suggest improving conditions for these parameters. Recreational uses are fully supported.

Whites Creek (PD-191) - Aquatic life uses are fully supported. This is a blackwater system, characterized by naturally low pH conditions. Although pH excursions occurred, they were typical of values seen in blackwater systems and were considered natural, not standards violations. Recreational uses are fully supported and a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter.

Great Pee Dee River – There are two SCDHEC monitoring sites along this section of the Great Pee Dee River. At the upstream site (**PD-012**), aquatic life and recreational uses are fully supported; however, there is a significant increasing trend in five-day biochemical oxygen demand. There is a significant increasing trend in pH. Significant decreasing trends in turbidity, total phosphorus concentration, and fecal coliform bacteria concentration suggest improving conditions for these parameters. At the downstream site (**PD-015**), aquatic life uses are fully supported; however, there is a significant decreasing trend in dissolved oxygen concentration. There is a significant increasing trend in pH. Recreational uses are partially supported at this site due to fecal coliform bacteria excursions.

Lake Wallace - There are two SCDHEC monitoring sites along Lake Wallace. This is a blackwater system, characterized by naturally low pH conditions. At the uplake site (**RL-02324**), aquatic life and recreational uses are fully supported. At the downlake site (**CL-086**), aquatic life and recreational uses are also fully supported. Although pH excursions occurred, they were typical of values seen in blackwater systems and were considered natural, not standards violations.

Crooked Creek - There are three SCDHEC monitoring sites along Crooked Creek. This is a blackwater system, characterized by naturally low pH conditions. Although pH excursions occurred at all sites, they were typical of values seen in blackwater systems and were considered natural, not standards violations. At the furthest upstream site (**PD-107**), aquatic life and recreational uses are fully supported. Significant increasing trends in dissolved oxygen concentration and decreasing trends in five-day biological oxygen demand and total phosphorus concentration suggest improving conditions for these parameters. At the midstream site (**PD-014**), aquatic life and recreational uses are also fully supported and significant decreasing trends in five-day biological oxygen demand and turbidity suggest improving conditions for these parameters. At the furthest downstream site (**PD-063**), aquatic life and recreational uses are again fully supported and a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter.

Cedar Creek (PD-151) – Aquatic life uses are not supported due to pH excursions. There is also a significant increasing trend in total nitrogen concentration. There is a significant decreasing trend in pH. Significant decreasing trends in five-day biological oxygen demand and total phosphorus concentration suggest improving conditions for these parameters. Recreational uses are fully supported and a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter.

*A fish consumption advisory has been issued by the Department for mercury and includes the **Great Pee Dee River** and **Lake Wallace** within this watershed (see advisory p.130).*

Natural Swimming Areas

<i>FACILITY NAME RECEIVING STREAM</i>	<i>PERMIT # STATUS</i>
LAKE PAUL WALLACE LAKE WALLACE	34-N01 ACTIVE
CAMP HORIZON LAKE WALLACE	34-N04 ACTIVE
CAMP COKER SPOT MILL CREEK	13-N02 ACTIVE

NPDES Program

Active NPDES Facilities

<i>RECEIVING STREAM FACILITY NAME PERMITTED FLOW @ PIPE (MGD)</i>	<i>NPDES# TYPE COMMENT</i>
GREAT PEE DEE RIVER TOWN OF CHERAW WWTP PIPE #: 001 FLOW: 4.0	SC0020249 MAJOR DOMESTIC
GREAT PEE DEE RIVER DOMTAR PAPER CO.LLC/MARLBORO MILL PIPE #: 001, 01A FLOW: 15.0	SC0042188 MAJOR INDUSTRIAL
GREAT PEE DEE RIVER DELTA MILLS INC. PIPE #: 001 FLOW: 3.8 PIPE #: 003 FLOW: 0.5	SC0002151 MAJOR INDUSTRIAL
GREAT PEE DEE RIVER GALEY & LORD, INC./SOCIETY HILL PIPE #: 001 FLOW: 4.95	SC0002704 MAJOR INDUSTRIAL
PEE DEE RIVER TRIBUTARY HANSON AGGREGATES SE/CASH MINE PIPE #: 001 FLOW: M/R	SCG730467 MINOR INDUSTRIAL
CROOKED CREEK HANSON AGGREGATES SE/MARLBORO PIPE #: 001 FLOW: M/R	SCG730359 MINOR INDUSTRIAL
CROOKED CREEK CITY OF BENNETTSVILLE WWTP PIPE #: 001 FLOW: 3.9	SC0025178 MAJOR DOMESTIC
CROOKED CREEK US CONSTRUCTION/BERMUDA PIT PIPE #: 001 FLOW: M/R	SCG730472 MINOR INDUSTRIAL
SPOT MILL CREEK TRIBUTARY MOREE FARMS/PARADISE PIT PIPE #: 001 FLOW: M/R	SCG730558 MINOR INDUSTRIAL

WILSON BRANCH TRIBUTARY SCHAEFFLER GROUP USA, INC. PIPE #: 001 FLOW: M/R	SCG250163 MINOR INDUSTRIAL
PHILS CREEK PALMETTO BRICK/IRBY MINE PIPE #: 001 FLOW: M/R	SCG730240 MINOR INDUSTRIAL
PHILS CREEK TRIBUTARY PALMETTO BRICK/ROBERTS MINE PIPE #: 001 FLOW: M/R	SCG730573 MINOR INDUSTRIAL
CEDAR CREEK PALMETTO BRICK/WINBURN MINE PIPE #: 001 FLOW: M/R	SCG730241 MINOR INDUSTRIAL
BEVERLY CREEK MARLBORO COUNTY/COUNTY PIT PIPE #: 001 FLOW: M/R	SCG730158 MINOR INDUSTRIAL
BEAVERDAM CREEK TRIBUTARY PALMETTO BRICK/CLINKSCALE MINE PIPE #: 001 FLOW: M/R	SCG730443 MINOR INDUSTRIAL

Nonpoint Source Management Program

Land Disposal Activities

Landfill Facilities

<i>LANDFILL NAME</i> <i>FACILITY TYPE</i>	<i>PERMIT #</i> <i>STATUS</i>
PALMETTO BRICK CO. INDUSTRIAL	353324-1601 ACTIVE
CHERAW SANITARY LANDFILL MUNICIPAL	----- CLOSED
WILLIAMETTE COMPOSTING COMPOSTING	353301-3001 INACTIVE
FURR COMPOSTING FACILITY COMPOSTING	132670-3001 INACTIVE
FURR FACILITY C&D LANDFILL C&D	132670-1201 ACTIVE
MCDUFFIE & SON COMPOSTING COMPOSTING	352691-3001 ACTIVE
WEYERHAEUSER COMPANY INDUSTRIAL	353301-1601 ACTIVE
WEYERHAEUSER COMPANY LAND APPLICATION	353301-8001 ACTIVE
CHESTERFIELD COUNTY LANDFILL INDUSTRIAL	131001-1601 ACTIVE
SANDHILLS REGIONAL MSW LANDFILL MUNICIPAL	----- PROPOSED

Mining Activities

***MINING COMPANY
MINE NAME***

***PERMIT #
MINERAL***

PALMETTO BRICK CO.
CLINKSCALE

1528-69
SAND

PALMETTO BRICK CO.
MARLBORO PIT

0171-69
CLAY

PALMETTO BRICK CO.
ROBERTS MINE

1559-69
SAND

HANSON AGGREGATES SE, INC.
CASH PLANT

0092-25
SAND/GRAVEL

FURR GRADING & PAVING, INC.
PEE DEE MINE

0466-25
SAND/GRAVEL

MARLBORO COUNTY
MARLBORO COUNTY PIT

0280-69
SAND/CLAY

TE BROWN & ASSOCIATES
BURNT FACTORY MINE

1716-69
SAND/CLAY

HANSON AGGREGATES SE, INC.
MARLBORO PLANT

0095-69
SAND/GRAVEL

HANSON AGGREGATES SE, INC.
MARLBORO FIELD PLANT

0096-69
SAND/GRAVEL

PALMETTO BRICK CO.
WINBURN

0997-25
KAOLIN

Water Quantity

***WATER USER
STREAM***

***REGULATED CAP. (MGD)
PUMPING CAP. (MGD)***

TOWN OF CHERAW
GREAT PEE DEE RIVER

4.5
11.5

CITY OF BENNETTSVILLE
LAKE WALLACE

4.00
6.00

Growth Potential

There is a low to moderate potential for growth in this watershed, which contains the Towns of Cheraw and Society Hill, and the City of Bennettsville and is projected to have one of the largest population growth rates in the region. There are numerous industries in the watershed, most in and around the municipal limits of Cheraw. Commercial development is also centered around Cheraw, particularly west of town along S.C. Hwy. 9, and additional growth is expected. A large portion of the watershed is not served by public water or sewer systems, primarily due to the large expanse of the floodplain associated with the Great Pee Dee River. These services are provided in and immediately around the Town of Cheraw, and along S.C. Hwy. 34 east of the City of Darlington. Water and sewer services are available in and around Bennettsville and should encourage growth. Water service is available in Society Hill, but there is no sewer service. A

portion of the watershed is within the Sand Hills State Forest, and the remainder is primarily agricultural and timberland uses. The proposed Preferred Alternative route of I-73 (Northern Corridor) would cross this watershed and could bring some growth to the area, especially around interchanges.